

Jan: 30

Work Order ID 77354

77354

December-06-11 10:27:43 AM

Item ID: D350-591-311 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Heli-Access-Step, Long LH
Start Date: 06/12/2011 Start Qty: 10.00 *10* Cust Item ID:
Required Date: 30/01/2012 Req'd Qty: 10.00 *10* Customer:
Reference:

Approvals: Process Plan: M.L.S Date: 11/12/06 Tooling: Date: Run Start *NR1*
QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3272	Rev B

100 DOCUMENT CONTROL 0.00
100
DC Memo 0.00
Document Control Photocopy bluefile and type labels as per PPP D350-591-311 CHG001
S 12/12/06

for M.L.S 12-2-1
(10)

110 Large Fab 0.00
110
Large Fab Memo 0.00
Large Fab 1-Bevel end for welding FWD ONLY

12.0.25 10

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg
D3272
A/RAluminum Rod 114514
119712
3-Grind End Plate flush → Ac 12/01/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

77354

Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 06/12/2011 **Start Qty:** 10.00

10

Cust Item ID:

Required Date: 30/01/2012 **Req'd Qty:** 10.00

10

Customer:

Reference:

Run Start *NR1*

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

QC9- Inspect visual per QSI004- Fusion Welds

0.00

120

QC

Memo

0.00

Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 77354

December-06-11 10:27:43 AM

77354

Page 3

Item ID: D350-591-311

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step, Long LH

Start Date: 06/12/2011 Start Qty: 10.00

10

Cust Item ID:

Required Date: 30/01/2012 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC3- Inspect Part Finish	0.00							
150									
QC	Memo	0.00							
Quality Control									
180		0.00							
180									
Large Fab	Large Fab	0.00							
Large Fab	Memo								
	1-Assemble Leg Assembly as per Dwg D3272.								
	2-Leave one rivet out until welding is complete.								
	3-Bevel Aft end for welding								
	4-Inspect for foreign object as per QSI 024								
	5-Weld Aft End Plate as per QSI 004 & Dwg D3272								
	A/RAluminum Rod <u>114514</u>								
	6-Grind End Plate flush								
	7-Install last rivet as per Dwg.								

12.01.28

10 *0*

12/01/28

(x10) *0*

12.01.31

10 *0*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

77354

December-06-11 10:27:43 AM

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Stop *NS2*

Start Date: 06/12/2011 **Start Qty:** 10.00

10

Cust Item ID:

Required Date: 30/01/2012 **Req'd Qty:** 10.00

10

Customer:

Reference:

Run Start *NR1*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

190 QC10- Inspect visual per QSI004- ground welds

0.00

190

0.00

QC Memo

Quality Control

200 QC5- Inspect part completeness to step on W/O

0.00

200

0.00

QC Memo

Quality Control

210 Chemical Conversion Coat per QSI005 4.1

0.00

210

0.00

HandFinish Memo

Hand Finishing

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 77354

77354

Page 5

December-06-11 10:27:43 AM

Item ID: D350-591-311 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Heli-Access-Step, Long LH
 Start Date: 06/12/2011 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 30/01/2012 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
220 Powdercoat Powder Coating	<i>m 119480</i> Memo START TIME: <u>1:45</u> OVEN TEMPERATURE: <u>320°F</u> FINISH TIME: <u>2:15</u>	0.00							<i>10X of m- 12/02/01 LH</i>
230	Wing Walk as per dwg QSI005 4.4 Batch <u>120125</u>	0.00							
230 HandFinish Hand Finishing	Memo	0.00							<i>10 BL 12-21.</i>
240	QC3- Inspect Part Finish	0.00							
240 QC Quality Control	Memo	0.00							<i>10LH of all 12/02/02 counted & measured</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 77354***77354***

Page 6

December-06-11 10:27:43 AM

Item ID: D350-591-311

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step, Long LH

Start Date: 06/12/2011 Start Qty: 10.00

10

Cust Item ID:

Required Date: 30/01/2012 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	Pick Kit	0.00							
250									
Packaging	Memo	0.00							<u>SP 12-02-02.</u>
Packaging									
260	QC4- 100% Inspect kits for completeness	0.00							
260									
QC	Memo	0.00							<u>512/02/06</u>
Quality Control									<u>40</u> <u>4</u>
270		0.00							
270									
Packaging	Packaging	0.00							
Packaging	Memo								<u>610/2/07</u> <u>(10)</u>
Packaging	Identify and pack for shipping as per PPPD350-591-311								
	Location: <u>SHIP ROOM</u>								

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 77354***77354***

Page 7

December-06-11 10:27:44 AM

Item ID: D350-591-311

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step, Long LH

Start Date: 06/12/2011 Start Qty: 10.00

10

Cust Item ID:

Required Date: 30/01/2012 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.00							
Quality Control									

UMF

12-02-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-06-11 10:27:47 AM

Work Order ID: 77354

77354

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 06/12/2011

Required Date: 30/01/2012

Start Qty: 10.00

Required Qty: 10.00

D3066-1 Manufactured No

180 Each 148.0000 2 20

D3066-1

Spacer

**

B77564 x(20) Ae 12/01/28

Location

Loc Qty

Loc Code

WA015

148

75076

48

76180

100

MS20600-AD4W4 Purchased No

180 Each 2,362.000 16 160

MS20600-AD4W4

Rivets

**

B119883 (112) Ae 12/01/28

B120308 (48)

Location

Loc Qty

Loc Code

ST321

2357

116188

59

117364

253

117601

200

117885

195

118840

1150

119860

500

WA018

5

116712

5

D3065-041 Manufactured No

180 Each 33.0000 1 10

D3065-041

Step Leg Assembly Hi

**

B79336 x(9) Ae 12/01/28

B78797 x(1)

Location

Loc Qty

Loc Code

WA

33

66149

0

76193

31

76194

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-06-11 10:27:48 AM

Work Order ID: 77354

77354

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 06/12/2011

Required Date: 30/01/2012

Start Qty: 10.00

Required Qty: 10.00

D3067-1 Manufactured No 180 Each 125.0000 1 10

D3067-1

End Plate

**

12.01.30

Location	Loc Qty	Loc Code
WA016 <i>378022</i>	125	<i>10</i>
67582	2	
68214	1	
75468	32	
76179	90	

AN3-35A Purchased No 250 Each 145.0000 2 20

AN3-35A

Bolt

**

M 20187 SP

Location	Loc Qty	Loc Code
ST353	145	
117619	3	
119449	100	
119641	42	

D3235-1 Manufactured No 250 Each 147.0000 2 20

D3235-1

Mounting Lug

**

B 77566 SP

Location	Loc Qty	Loc Code
ST481	147	
73411	47	
75547	100	

D3278-041 Manufactured No 250 Each 62.0000 1 10

D3278-041

Support Assembly

**

B 77057 SP

Location	Loc Qty	Loc Code
ST481	62	
76169	35	
76170	27	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-06-11 10:27:48 AM

Work Order ID: 77354

77354

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 06/12/2011

Required Date: 30/01/2012

Start Qty: 10.00

Required Qty: 10.00

AN960JD416 NAS1149D0463J Purchased No

250 Each 0.0000 16 160

**

m119075 SP.

AN960JD416

Washer

AN960JD516 NAS1149D0563J Purchased No

250 Each 0.0000 4 40

**

m118206 SP

AN960JD516

Washer

AN5-36A Purchased No

250 Each 144.0000 2 20

**

SP m120423 -15

AN5-36A

Bolt

Location

Loc Qty

Loc Code

ST340

144

118451

19

119449

50

119641

75

D2618 Manufactured No

250 Each 152.0000 2 20

**

B 77563 SP.

D2618

Bushing

Location

Loc Qty

Loc Code

ST019

152

74458

52

76130

100

D2230-3 Manufactured No

250 Each 99.0000 4 40

**

*B 77561 SP.
12-02-03.*

D2230-3

Lug

Location

Loc Qty

Loc Code

ST480

99

53881

4

70973

1

74440

10

75546

84

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-06-11 10:27:48 AM

Work Order ID: 77354

77354

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 06/12/2011

Required Date: 30/01/2012

Start Qty: 10.00

Required Qty: 10.00

D2856-400

Manufactured No

250 f

252.2445 1.2 12

D2856-400

Abraison Strip

**

SP

Location

Loc Qty

Loc Code

ST409

252.2445

63735

0.6696

68076

0.3149

71164

37.86

73491

213.4

12x

*** cut (2) at 7.20" (D2856-400-720) ***

MS21042L3

Purchased No

250 Each

7,467.000 1 2 20

MS21042L3

Nut

**

SP

Location

Loc Qty

Loc Code

ST300

87

117441

16

117885

35

118451

5

118927

31

ST516

5994

119017

5994

ST518

1386

119075

1386

20x

AN4-13A

Purchased No

250 Each

981.0000 8 80

AN4-13A

Bolt

**

SP 12-02-02

Location

Loc Qty

Loc Code

ST357

981

118078

17

118838

364

119449

500

119798

100

m/20187 36x

36x 36x 36x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-06-11 10:27:48 AM

Work Order ID: 77354

77354

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step, Long LH

Start Date: 06/12/2011

Required Date: 30/01/2012

Start Qty: 10.00

Required Qty: 10.00

MS21042L5

Purchased

No

250

Each

2,192.000

2

20

MS21042L 5

**

SP

Location

Loc Qty

Loc Code

ST300

692

116105

5

116548

43

117611

52

~~118179~~

496

118910

96

20x

ST518

1500

119109

1500

MS21042L4

Purchased

No

250

Each

10,136.00

8

80

MS21042L 4

**

SP

Location

Loc Qty

Loc Code

ST300

531

117441

51

117601

347

118451

133

ST516

4605

119017

4605

ST518

5000

119075

5000

80x

AN960JD10

NAS1149D0363J

Purchased

No

250

Each

0.0000

4

40

AN960JD10

**

M/20/42

SP 12-02-02.

Washer

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>qp</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>H</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

RELEASED

07.06.04 *ff*

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

GENERAL NOTES:

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. *77354 M.C.J*

11/12/06

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

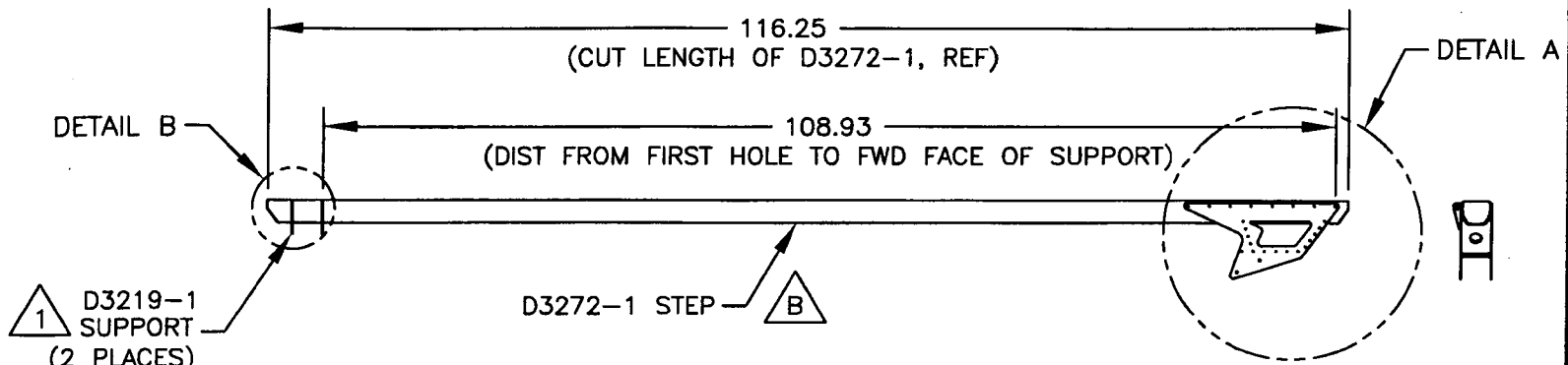
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

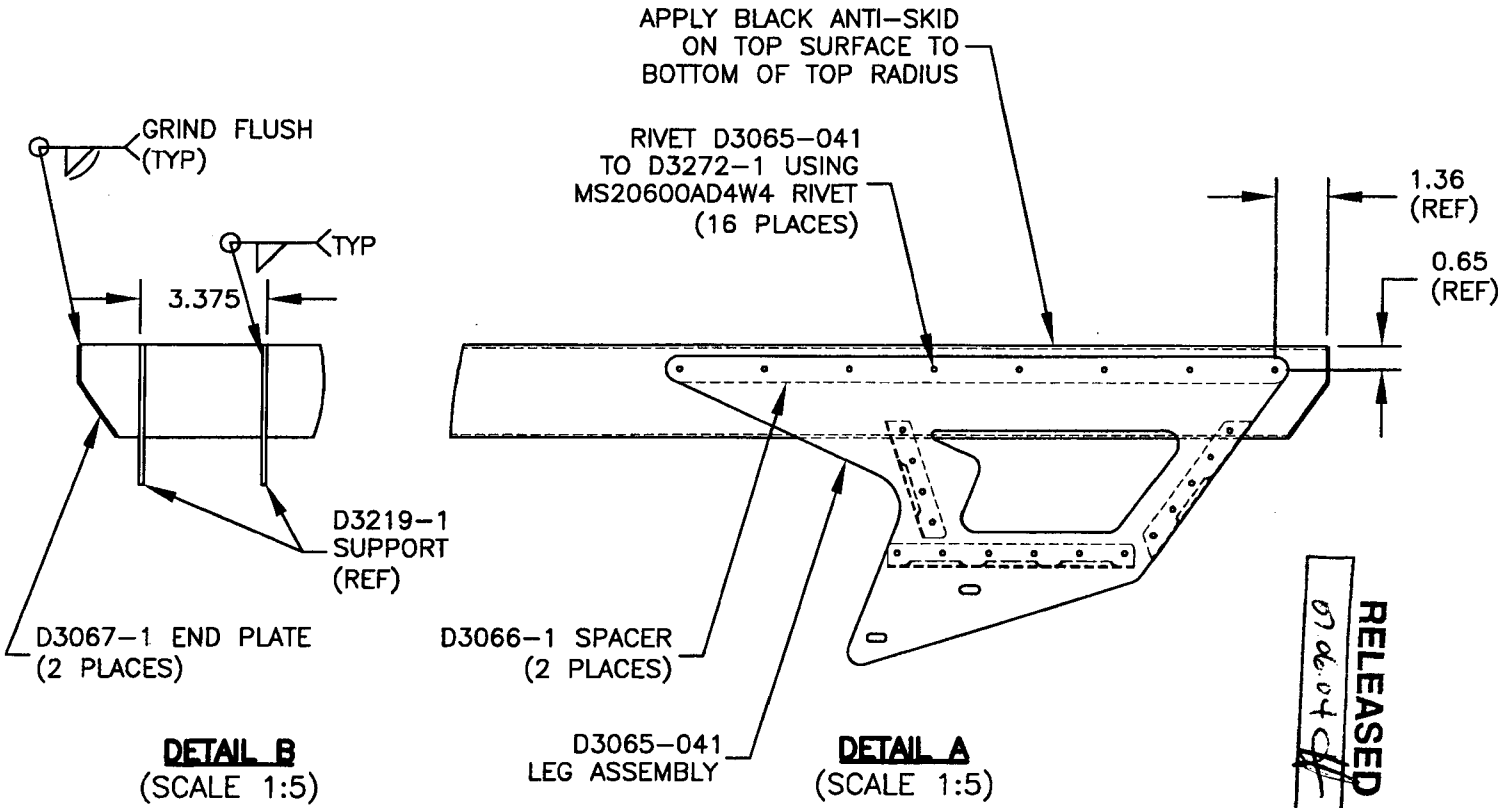
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

77354



D3272-041 STEP ASSEMBLY (LH. SHOWN)
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)



RELEASED
07.06.04

DESIGN	AP	DRAWN BY	JR	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	CE	APPROVED	[Signature]	REV. B
DATE	07.05.18	TITLE	D3272	SHEET 2 OF 3
			STEP ASSEMBLY, HI LONG	SCALE 1:20

Copyright © 2004 by DART Aerospace Ltd
 THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

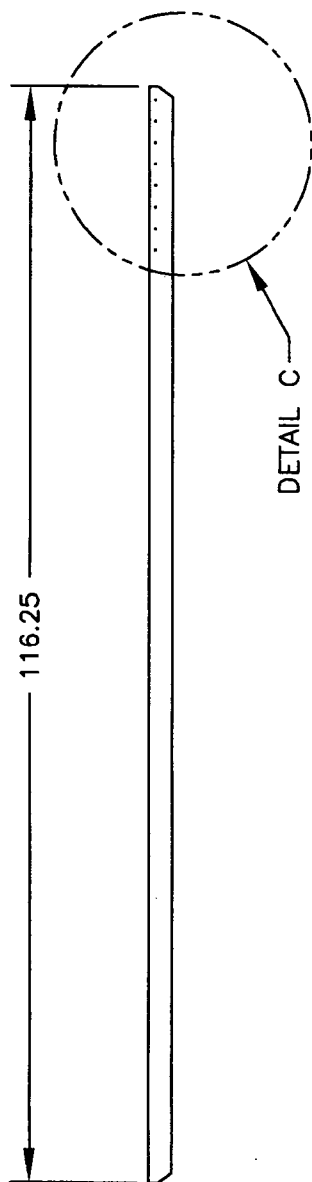
NOTE: Date & initial all entries



DESIGN <i>qp</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE 1:20

RELEASED

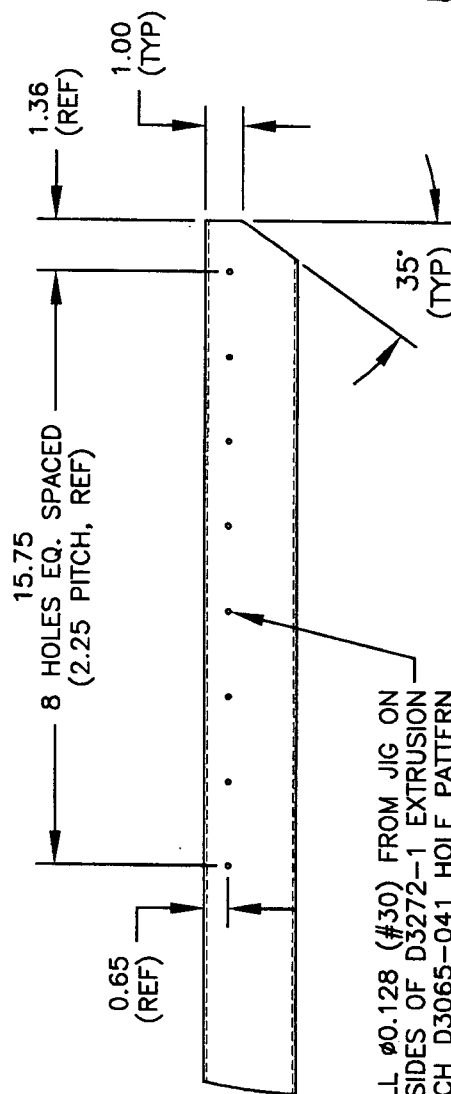
07.06.04



DETAIL C

B **D3272-1 STEP**

(MAKE FROM D2622-120 STEP EXTRUSION)



DRILL $\phi 0.128$ (#30) FROM JIG ON BOTH SIDES OF D3272-1 EXTRUSION TO MATCH D3065-041 HOLE PATTERN

DETAIL C
(SCALE 1:5)

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

REFERENCE ONLY

DART AEROSPACE LTD.

D350-591
Page 23 of 23

Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X								D350-591-211	<i>Heli-Access-Step</i> ™, Long Step – High Skid, LH
	X							D350-591-212	<i>Heli-Access-Step</i> ™, Long Step – High Skid, RH
		X						D350-591-213	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
			X					D350-591-214	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
				X				D350-591-215	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
					X			D350-591-216	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
						X		D350-591-311	<i>Heli-Access-Step</i> ™, Long Step – High Skid, LH
							X	D350-591-312	<i>Heli-Access-Step</i> ™, Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
	1							D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
		1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
			1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
				1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
					1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
						1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
							1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
		2	2	2	2			D2230-1	MOUNTING LUG
		2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8							D2274	RADIUS BLOCK
						2	2	D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2			AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	*WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	*DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.